

WHAT IS CLAIMED IS:

1. A shifter mechanism comprising, in combination:
 - a shifter lever movable along a shift path;
 - a detent plate movable with the shifter lever along the shift path and forming a detent profile defining a plurality of gear positions,
 - a pawl movable between a locking position wherein the pawl engages the detent profile to lock the shifter lever in one of the plurality of gear positions and an unlocking position wherein the shifter lever is movable along the shift path between the plurality of gear positions;
 - an actuator operatively coupled to the pawl to selectively move the pawl; and
 - wherein the pawl includes a roller that engages the detent profile when the pawl is in the locking position.
2. The shifter system according to claim 1, wherein said detent profile includes a plurality of grooves.
3. The shifter system according to claim 1, wherein the actuator is a linear actuator having a pin extendable along a linear path.
4. The shifter system according to claim 3, wherein said linear actuator is a solenoid.
5. The shifter system according to claim 3, wherein said pin is in an extended position when said actuator is energized and a retracted position when said actuator is unenergized.
6. The shifter system according to claim 3, wherein said pin is in an extended position when the pawl is in the unlocking position and a retracted position when the pawl is in the locking position.

7. The shifter system according to claim 1, wherein the roller is rotatably secured to a detent lever and the detent lever is pivotable to move the pawl between the locking position and the unlocking position.

8. The shifter system according to claim 7, wherein the pawl moves along an arcuate path between the locking position and the unlocking position and the actuator is a linear actuator which is operatively connected to the detent lever to pivot the detent lever along the arcuate path.

9. The shifter system according to claim 1, wherein the pawl moves along an arcuate path between the locking position and the unlocking position.

10. A shifter mechanism comprising, in combination:

- a shifter lever movable along a shift path;
- a detent plate movable with the shifter lever along the shift path and forming a detent profile defining a plurality of gear positions,
- a pawl movable between a locking position wherein the pawl engages the detent profile to lock the shifter lever in one of the plurality of gear positions and an unlocking position wherein the shifter lever is movable along the shift path between the plurality of gear positions;
- a pivotable detent lever carrying the pawl over an arcuate path between the locking position and the unlocking position; and
- a linear actuator operatively coupled to the detent lever to selectively pivot the detent lever.

11. The shifter system according to claim 10, wherein said detent profile includes a plurality of grooves.

12. The shifter system according to claim 10, wherein the linear actuator has a pin extendable along a linear path.

13. The shifter system according to claim 12, wherein said linear actuator is a solenoid.
14. The shifter system according to claim 12, wherein said pin is in an extended position when said actuator is energized and a retracted position when said actuator is unenergized.
15. The shifter system according to claim 12, wherein said pin is in an extended position when the pawl is in the unlocking position and a retracted position when the pawl is in the locking position.
16. The shifter system according to claim 10, wherein the pawl includes a roller that engages the detent profile when the pawl is in the locking position.
17. The shifter system according to claim 16, wherein the roller is rotatably secured to the detent lever.
18. A shifter mechanism comprising, in combination:
 - a shifter lever movable along a shift path;
 - a detent plate movable with the shifter lever along the shift path and forming a detent profile defining a plurality of gear positions,
 - a pawl movable between a locking position wherein the pawl engages the detent profile to lock the shifter lever in one of the plurality of gear positions and an unlocking position wherein the shifter lever is movable along the shift path between the plurality of gear positions;
 - an actuator operatively coupled to the pawl to selectively move the pawl;
 - a spring plate movable with the shifter lever along the shift path and forming a secondary detent profile; and
 - a spring engaging the secondary detent profile as the shifter lever moves over the shift path to provide frictional resistance to the movement of the shifter lever.

19. The shifter system according to claim 18, wherein the spring includes a leaf spring.
20. The shifter system according to claim 18, wherein said secondary detent profile includes a plurality of grooves.